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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,489	02/18/2004	Alex Simmons	60001.0303US01/MS 302496.	3119
7590 Christopher J. Leonard Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			EXAMINER HASSAN, AURANGZEB	
			ART UNIT 2182	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/781,489	<b>Applicant(s)</b> SIMMONS ET AL.	
	<b>Examiner</b> AURANGZEB HASSAN	<b>Art Unit</b> 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/26/2008 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 15 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1: lines 14 – 17, claim 15: lines 14 – 17 and claim 18: lines 12 – 15 recite limitations of receiving a selection of the selection-based input mode button and latching the pen-based input device based upon the selection. The Examiner notes that these

claim limitations are not enabled by the specification and has noted the support cited by the Applicant, Specification page 9, lines 6 - 15 from the remarks received 5/27/2008 page 12. The Examiner notes that the mere "selection" of the selection-based input mode button does not cause the immediate effect of latching the pen-based input device. The Specification as best understood by the Examiner states that when a **pen-based input device selects the selection-based input mode button** the pen-based input device functions as a selection-based input device, i.e. *"the user may latch the pen 215 in mouse mode by using the pen 215 to click or select the mouse mode button 212"* (specification page 8, lines 24 – 30).

To expedite a complete examination of the instant application, the claims rejected under 35 USC 112, first paragraph will be best interpreted as the pen-based input device utilized to select a selection-based input mode therein allowing the pen-based input device to have selection-based input device functionality in anticipation of the applicant amending these claims to overcome the rejection.

Appropriate correction/clarification required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 – 9 and 11 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. (US Patent Number 5,365,461 hereinafter “Stein”) in view of Fitzmaurice et al. (***Tracking Menus*** by George Fitzmaurice, Azam Khan, Robert Pieke, Bill Buxton, Gordon Kurtenbach, hereinafter “Fitzmaurice”) further in view of Hawkins et al. (US Patent Number 5,133,076).

6. As per claims 1 and 15, Stein teaches a computer-implemented method of automatically switching between computer-enabled input modes and a computer-readable storage medium, comprising:

providing a selection-based input mode selector, wherein the selection-based input mode selector is configured to receive an input to actuate a selection-based input mode for recognizing inputs from a selection-based input device (switch 18 in “**a**” **position** is the selector for the selection-based input, figure 1, column 4, lines 7 – 17);

providing a pen-based input mode selector, wherein the pen-based input mode selector is configured to receive an input to actuate a pen-based input mode for recognizing pen inputs from a pen-based input device (switch 18 in “**b**” **position** is the selector the pen-based input, figure 1, column 4, lines 18 – 26);

providing an auto switch mode selector, wherein the auto switch mode selector is configured to receive an input to actuate an auto switch mode for enabling automatic switching between the selection-based input mode and the pen-based input mode (automatic mode selector chosen by operator 84, figure 4, column 5, lines 61 – 67);

receiving a selection of the selection-based input mode (switch 18 in “a”  
**position**, figure 1);

while the selection-based input mode is actuated, detecting a selection-based  
input from the selection-based input device (figure 5a),

automatically unlatching the pen-based input device, in response to detecting the  
selection-based input from the selection-based input device, and actuating the  
selection-based input mode for the selection-based input device (90, figure 4);

receiving a selection of the auto switch mode selector to actuate the auto switch  
mode (actuating auto mode 84, figure 4, column 5, lines 61 – 67);

while in the auto switch mode, detecting a pen-use input from the pen-based  
input device (88, figure 4); and

in response to detecting the pen-use input from the pen-based input device,  
automatically switching from the selection-based input mode to the pen-based input  
mode without receiving a selection of the pen-based input mode selector (90, figure 4).  
(As per Claim 15, the selection-based is equivalent to the mouse-based, since the  
human touch is a mousing device with cursor control, column 1, lines 30 – 32).

Stein does not teach the selectors to be displayed as buttons on a user interface.

Fitzmaurice teaches a graphical user interface mode selection displayed as  
buttons (figure 16).

It would have been obvious to one of ordinary skill in the art to utilize the  
commonly known graphical buttons on a user interface of Fitzmaurice in the above

teachings of Stein. One of ordinary skill would be motivated to make such modification in order to enhance rapid switching (pages 71 and 78).

The combination of Stein and Fitzmaurice does not explicitly disclose utilizing a pen-based input device in a selection-based mode.

Hawkins teaches a computer-implemented method further comprising latching the pen-based input device, in response to receiving the selection of the selection based input mode button, and actuating the selection-based (initial) input mode for the pen-based input device (by touching the display on the bottom segment 13b pen is latched into the keyboard emulation mode, column 9, lines 49 – 53, figure 6).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the interchangeable functionality of inputs of Stein with the above teachings of Hawkins. One of ordinary skill in the art would be motivated to make such modification in order to increase versatility in its data processing and data input capabilities (column 1, lines 56 – 58).

7. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 2, Stein teaches a computer-implemented method comprising detecting a use-input from the selection-based input device; and

in response to detecting a user-input of the selection-based input device, automatically switching from the pen-based input mode back to the selection-based input mode without receiving a selection of the selection-based input mode button (in

auto mode rapidly switches between pen and selection-based input mode, column 5, lines 51 – 53, and selection-based input is detected in step 94, figure 4).

8. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 3, Stein teaches a computer-implemented method prior to actuating the selection-based input mode, actuating the auto switch mode button (auto switch mode selector and be actuated by the user at any point 84, figure 4, column 5, lines 61 – 67).

9. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claims 4 and 16, Stein teaches a computer-implemented method whereby the selection-based input device is a mousing device (human touch is a mousing device with cursor control, column 1, lines 30 – 32).

10. As per claims 5, 14, 17 and 20, Stein and Fitzmaurice fail to teach a computer-implemented method whereby the selection-based input device is a keyboard.

In an analogous method Hawkins teaches a method whereby the selection-based input device is a keyboard (keyboard 22, figure 2b).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Stein with the above teachings of Hawkins. One of ordinary skill in the art would have been motivated to make such modification in order to increase peripheral flexibility (column 2, lines 5 – 11).



11. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 6, Stein teaches a selection and pen-based input and the interchangeable functionality therein (column 1, lines 11 – 51), however does not explicitly disclose all the latching functionality in between.

Hawkins teaches a computer-implemented method comprising latching (analog mode, column 3, lines 45 – 47) the selection-based input device so that the selection-based input device behaves as a pen-based input device (allows for pen functionality in drawing, column 3, lines 31 – 39).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the interchangeable functionality of inputs of Stein with the above teachings of Hawkins. One of ordinary skill in the art would be motivated to make such modification in order to increase versatility in its data processing and data input capabilities (column 1, lines 56 – 58).

12. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 7, Hawkins teaches a computer-implemented method whereby while the selection-based input device is latched for behavior as a pen-based input device, using the selection-based input device as a pen-based input device (when in analog mode allows for drawing with features of depth, column 3, lines 40 – 57).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the interchangeable functionality of inputs of the

combination of Stein and Fitzmaurice with the above teachings of Hawkins. One of ordinary skill in the art would be motivated to make such modification in order to increase versatility in its data processing and data input capabilities (column 1, lines 56 – 58).

13. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 8, Hawkins teaches a computer-implemented method further comprising detecting a use-input from the pen-based input device; and  
in response to detecting the use-input of the pen-based input device, automatically unlatching the selection-based input device from behaving as a pen-based input device without actuating the pen-based input mode selector (when the stylus touches screen pen is initiated, column 4, lines 60 – 63).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the interchangeable functionality of inputs of the combination of Stein and Fitzmaurice with the above teachings of Hawkins. One of ordinary skill in the art would be motivated to make such modification in order to increase versatility in its data processing and data input capabilities (column 1, lines 56 – 58).

14. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 9, Hawkins teaches a computer-implemented method whereby initiating use of the pen-based input device includes movement of the pen-based input

device whereby said pen-based input device is operative to input data when the pen-based input device is engaged with a computer-enabled display screen operative to receive input from the pen-based input device (stylus touches screen, column 4, lines 60 – 63).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the interchangeable functionality of inputs of the combination of Stein and Fitzmaurice with the above teachings of Hawkins. One of ordinary skill in the art would be motivated to make such modification in order to increase versatility in its data processing and data input capabilities (column 1, lines 56 – 58).

15. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 11, Hawkins teaches a computer-implemented method whereby while the pen-based input device is latched for behavior as a selection-based input device, using the pen-based input device as a selection-based input device (pen is used for keyboard emulation, figure 6, stylus may emulate a mouse or enter keystroke data, column 9, lines 49 – 53).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the interchangeable functionality of inputs of the combination of Stein and Fitzmaurice with the above teachings of Hawkins. One of ordinary skill in the art would be motivated to make such modification in order to

increase versatility in its data processing and data input capabilities (column 1, lines 56 – 58).

16. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 12, Hawkins teaches a computer-implemented method comprising detecting an input from the selection-based input device; and

in response to detecting the input of the selection-based input device, automatically unlatching the pen-based input device from behaving as a selection-based input device without actuating the selection-based input mode selector (shifts from keyboard emulation mode to actual keyboard interaction, column 12, lines 17 – 53).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the interchangeable functionality of inputs of the combination of Stein and Fitzmaurice with the above teachings of Hawkins. One of ordinary skill in the art would be motivated to make such modification in order to increase versatility in its data processing and data input capabilities (column 1, lines 56 – 58).

17. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claims 13 and 19, Stein teaches a computer-implemented method whereby detecting an input from the selection-based input device includes moving a

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mousing device (human touch is a mousing device with cursor control, column 1, lines 30 – 32).

18. Stein as modified by the teachings of Fitzmaurice/Hawkins as applied in claim 1 above, as per claim 18, it is recognized by the examiner that claim 18 is a mere combination of claims 1, 2, 6, 8, 10 and 12 and therefore rejected under the same grounds.

### ***Response to Arguments***

19. Applicant's arguments with respect to claims 1 - 9 and 11 - 20 have been considered but are moot in view of the new ground(s) of rejection.

20. Furthermore, the Applicant argues that Stein and Fitzmaurice do not teach interchangeability and Hawkins does not overcome the deficiencies therein including automatically switching modes.

As per the applicant's arguments, the Examiner respectfully disagrees. The Applicant argues that Hawkins does not disclose automatic switch mode functionality and selection-based and pen-based mode interchangeability. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The Examiner relies upon Stein and Fitzmaurice for the switching characteristics as can be seen in figure 5a of Stein.

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Hawkins is utilized for the interchangeable functionality so that a pen-based device can function as a selection-based device and vice versa.

### ***Conclusion***

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AURANGZEB HASSAN whose telephone number is (571)272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571)272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH

/Tariq Hafiz/

Supervisory Patent Examiner, Art Unit 2182